



NATIONAL INSTITUTES OF HEALTH

Scientific Directory  
1961  
and  
Annual Bibliography  
1960

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# Foreword

The third edition of the annual directory and bibliography of the National Institutes of Health, like its predecessors, is intended for reference use by research workers in the biomedical sciences inside and outside Government. It presents the broad outlines of NIH structure, names the professional staff, and lists those scientific and technical publications which derive from our program of direct research—laboratory and clinical—at Bethesda, Md., and in the field.

Entries in the volume are arranged by Institute and Division, with the directory and bibliography presented together at the level of the several laboratories or branches within each Institute or Division.

The directory, which reflects both organizational structure and position incumbents, includes the names of all staff members with doctoral degrees as well as those of other key individuals. Also listed are Visiting Scientists with tenure of a year or more. An asterisk before a name identifies the chief of a section.

The bibliography enumerates scientific and technical papers published by the NIH staff during 1960. (Among these are a number of papers omitted from the previous edition.) Alphabetized by senior author, the references are placed under the organizational unit to which that scientist was attached when the work was done. A list of the journals (with their corresponding abbreviations) appearing in the bibliography is included.

To increase the usefulness of this volume, author and subject indexes are provided. The first lists the names of all staff members included in either the directory or the bibliography; in this index the numbers in roman refer to *pages* (directory), and numbers in italic to *titles* (bibliography). The subject index—a new feature for this series—should furnish a better idea of the scope of NIH research as well as a quicker and more convenient reference to major and subordinate areas of research than is possible by a perusal of titles.

It is a pleasure to make this information available to those interested in knowing more about the staff and accomplishments of this institution.

*James Q. Shannon*

JAMES A. SHANNON, M.D.,  
Director, National Institutes of Health.



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Clarence A. Sooter, Ph. D. (cell biology; anatomy and physiology)  
Marguerite Young, Ph. D. (behavioral and psychological sciences)  
Benjamin Mehlman, Ph. D. (mental health)  
\**Chief, Analysis and Evaluation Section*, RALPH SIMON, Ph. D.

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Harry J. Clausen, Ph. D. (pharmacology and endocrinology; clinical research)  
R. Donald Reed, M.S. (biophysical and organic chemistry)  
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*Assistant to the Chief, JOHN L. S. HICKEY*

*Executive Officer, JAMES A. KING*

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DONALD L. SNOW

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\*Alexander Kimler, Ph. D.

Roy F. Kinard, D.V.M.

\*Charles W. McPherson, D.V.M.

Sara J. Uhrich, D.V.M.

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Lloyd G. Herman, Ph. D.

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# JOURNALS AND ABBREVIATIONS

M.A. Archives of Dermatology	A.M.A. Arch. Derm.
M.A. Archives of General Psychiatry	A.M.A. Arch. Gen. Psychiat.
M.A. Archives of Industrial Health	A.M.A. Arch. Industr. Health
M.A. Archives of Internal Medicine	A.M.A. Arch. Intern. Med.
M.A. Archives of Neurology	A.M.A. Arch. Neurol.
M.A. Archives of Ophthalmology	A.M.A. Arch. Ophthal.
M.A. Archives of Pathology	A.M.A. Arch. Path.
M.A. Journal of Diseases of Children	A.M.A. J. Dis. Child.
Academy of Medicine of New Jersey Bulletin	Acad. Med. N.J. Bull.
carologia	Acarologia
Acta Anatomica	Acta Anat.
Acta Chemica Scandinavica	Acta Chem. Scand.
Acta Genetica et Statistica Medica	Acta Genet.
Acta Geneticae Medicae et Gemellologiae	Acta Genet. Med.
Acta Pathologica et Microbiologica Scandinavica	Acta Pat. Microbiol. Scand.
Acta Unio Internationalis Contra Cancerum	Acta Un. Int. Cancer.
Actualites Neurophysiologiques	Actualites Neurophysiol.
Adult Leadership	Adult Leadership
Advances in Biological and Medical Physics	Advances Biol. Med. Phys.
Advances in Internal Medicine	Advances Intern. Med.
American Association of Blood Banks Bulletin	Amer. Ass. Blood Banks Bull.
American Heart Journal	Amer. Heart J.
American Industrial Hygiene Association Journal	Amer. Industr. Hyg. Ass. J.
American Journal of Anatomy	Amer. J. Anat.
American Journal of Cardiology	Amer. J. Cardiol.
American Journal of Clinical Nutrition	Amer. J. Clin. Nutr.
American Journal of Clinical Pathology	Amer. J. Clin. Path.
American Journal of Hospital Pharmacy	Amer. J. Hosp. Pharm.
American Journal of Human Genetics	Amer. J. Hum. Genet.
American Journal of Hygiene	Amer. J. Hyg.
American Journal of Medicine	Amer. J. Med.
American Journal of Nursing	Amer. J. Nurs.
American Journal of Obstetrics and Gynecology	Amer. J. Obstet. Gynec.
American Journal of Ophthalmology	Amer. J. Ophthal.
American Journal of Orthopsychiatry	Amer. J. Orthopsychiat.
American Journal of Pathology	Amer. J. Path.
American Journal of Physical Anthropology	Amer. J. Phys. Anthropol.
American Journal of Physiology	Amer. J. Physiol.
American Journal of Psychiatry	Amer. J. Psychiat.
American Journal of Psychology	Amer. J. Psychol.
American Journal of Public Health and the Nation's Health	Amer. J. Public Health
American Journal of Roentgenology, Radium Therapy and Nuclear Medicine	Amer. J. Roentgenol.
American Journal of Tropical Medicine and Hygiene	Amer. J. Trop. Med.
American Journal of Veterinary Research	Amer. J. Vet. Res.
American Psychologist	Amer. Psychol.
American Review of Respiratory Diseases	Amer. Rev. Resp. Dis.
American Sociological Review	Amer. Sociol. Rev.
Analytical Biochemistry	Anal. Biochem.
Analytical Chemistry	Anal. Chem.
Anatomical Record	Anat. Rec.

- |  |       |                                     |
|--|-------|-------------------------------------|
| Anesthesiology   | ----- | Anesthesiology                      |
| Angiology  | ----- | Angiology                           |
| Annals of Allergy  | ----- | Ann. Allergy                        |
| Annals of the Entomological Society of America                                     | ----- | Ann. Ent. Soc. Amer.                |
| Annals of Internal Medicine  | ----- | Ann. Intern. Med.                   |
| Annals of the New York Academy of Sciences   | ----- | Ann. N.Y. Acad. Sci.                |
| Annual Review of Biochemistry  | ----- | Ann. Rev. Biochem.                  |
| Annual Review of Medicine  | ----- | Ann. Rev. Med.                      |
| Annual Review of Physiology  | ----- | Ann. Rev. Physiol.                  |
| Annual Review of Psychology  | ----- | Ann. Rev. Psychol.                  |
| Annals of Surgery  | ----- | Ann. Surg.                          |
| Anthropological Linguistics  | ----- | Anthropol. Linguist.                |
| Antibiotics and Chemotherapy   | ----- | Antibiot. Chemother..               |
| Archives of Biochemistry and Biophysics  | ----- | Arch. Biochem.                      |
|  | or    | Arch. Biochem. Biophys.             |
| Archives of Environmental Health   | ----- | A.M.A. Arch. Environ. Health        |
| Archives Internationales de Pharmacodynamie et de<br>Therapie.                     | ----- | Arch. Int. Pharmacodyn.             |
| Archives Italiennes de Biologie  | ----- | Arch. Ital. Biol.                   |
| Archives of Neurology  | ----- | Arch. Neurol.                       |
| Archives of Ophthalmology  | ----- | Arch. Ophthal.                      |
| Archives of Oral Biology   | ----- | Arch. Oral Biol.                    |
| Archives de L'Institut Pasteur de Tunis  | ----- | Arch. Pasteur Inst. Tunis           |
| Archives of Physical Medicine and Rehabilitation                                   | ----- | Arch. Phys. Med.                    |
| Archives of Surgery  | ----- | Arch. Surg.                         |
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| Arthritis and Rheumatism   | ----- | Arthritis Rheum.                    |
| Bibliotheca Anatomica  | ----- | Bibl. Anat.                         |
| Biochemical and Biophysical Research Communications                                | ----- | Biochem. Biophys. Res. Com-<br>mun. |
| Biochemical Journal  | ----- | Biochem. J.                         |
| Biochemical Pharmacology   | ----- | Biochem. Pharmacol.                 |
| Biochemische Zeitschrift   | ----- | Biochem. Z.                         |
| Biochimica et Biophysica Acta  | ----- | Biochim. Biophys. Acta              |
| Biological Bulletin  | ----- | Biol. Bull.                         |
| Biologia Neonatorum  | ----- | Biol. Neonat.                       |
| Biometrics   | ----- | Biometrics                          |
| Biophysical Journal  | ----- | Biophys. J.                         |
| Blood; the Journal of Hematology   | ----- | Blood                               |
| Boletin Chileno de Parasitologia   | ----- | Bol. Chil. Parasit.                 |
| Brain; a Journal of Neurology  | ----- | Brain                               |
| British Heart Journal  | ----- | Brit. Heart J.                      |
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| British Medical Journal  | ----- | Brit. Med. J.                       |
| Brookhaven Symposia in Biology   | ----- | Brookhaven Symposia Biol.           |
| Bulletin of Drug Addiction and Narcotics   | ----- | Bull. Drug Addict. Narcot.          |
| Bulletin of Mathematical Biophysics  | ----- | Bull. Math. Biophys.                |
| Bulletin on Narcotics  | ----- | Bull. Narcot.                       |
| Bulletin of the New York Academy of Medicine                                       | ----- | Bull. N.Y. Acad. Med.               |
| Bulletin of the Research Council of Israel: Chemistry                              | ----- | Bull. Res. Counc. Israel<br>(Chem.) |
| Bulletin of the South Carolina Academy of Science                                  | ----- | Bull. S. Carolina Acad. Sci.        |
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Journal of the American Veterinary Medical Association.....	J. Amer. Vet. Med. Ass.

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Journal of Neuropathology and Experimental Neurology-----	J. Neuropath. Exp. Neurol.
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Laboratory Investigation-----	Lab. Invest.
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